Wind and Solar Curtailment February 03, 2020

This report is produced daily to provide a detailed accounting of the wind and solar renewable generation that was curtailed and the reasons why[1]. This report should be read in the context of the Renewables Watch report for a more complete understanding of both renewable curtailment and generation[2].

Wind and solar curtailments are grouped into the following categories:

1. Economic - Local: Market dispatch of generators with economic bids to mitigate local congestion[3].
2. Economic - System: Market dispatch of generators with economic bids to mitigate system-wide oversupply.
3. SelfSchCut - Local: Market dispatch of self-schedules to mitigate local congestion.
4. SelfSchCut - System: Market dispatch of self-schedules to mitigate system-wide oversupply.
5. ExDispatch - Local: Exceptional dispatch to mitigate local congestion.
6. ExDispatch - System: Exceptional dispatch to mitigate system-wide oversupply.

Note: Amounts smaller than 1 MW are filtered out for simplicity. Such small curtailments are occasionally observed when forecasts are lower than Pmin when market will de-commit the unit and send the 0 MW dispatch.

[1]Only wind and solar resources can be reported in this manner because these resources have a forecast. Curtailment is defined as the difference between actual production and the forecast when actual production is less than the forecast.

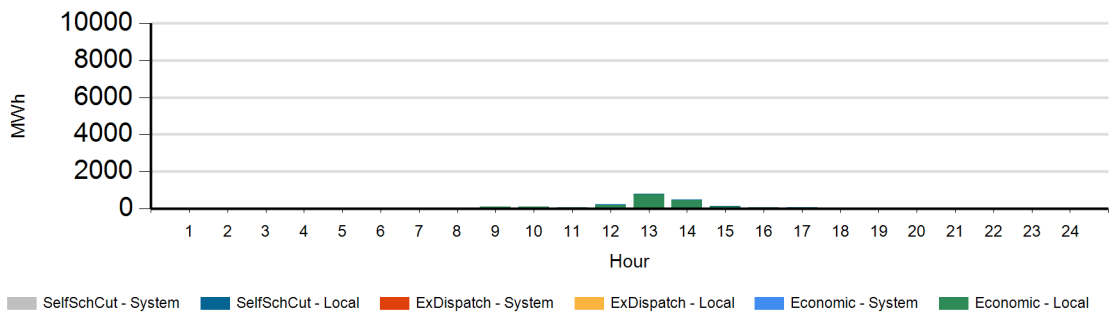
[2]The Renewables Watch report provides daily actual renewable production within the ISO grid. It is available at: http://www.caiso.com/green/renewableswatch.html.

[3]Congestion occurs when available, least-cost energy cannot be delivered to some loads because transmission facilities do not have sufficient capacity to deliver the energy.

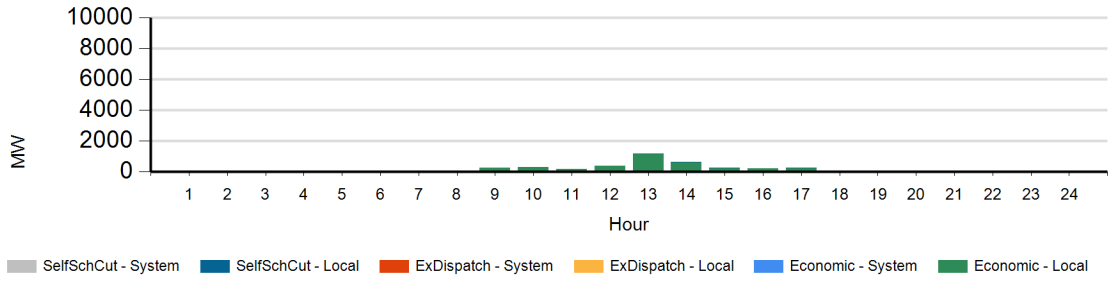
For more information on oversupply conditions, please see:
https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf

The following charts show the daily and 7-day wind and solar curtailment by category, if any.

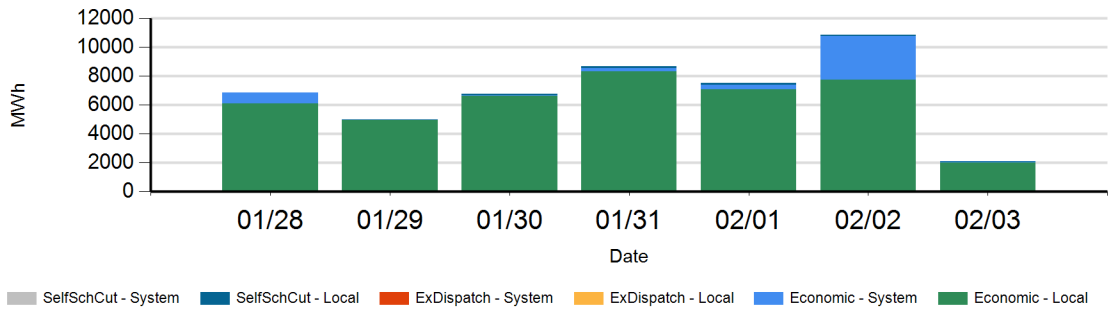
1. Hourly wind/solar generation curtailment energy in MWh. - 2/3/2020



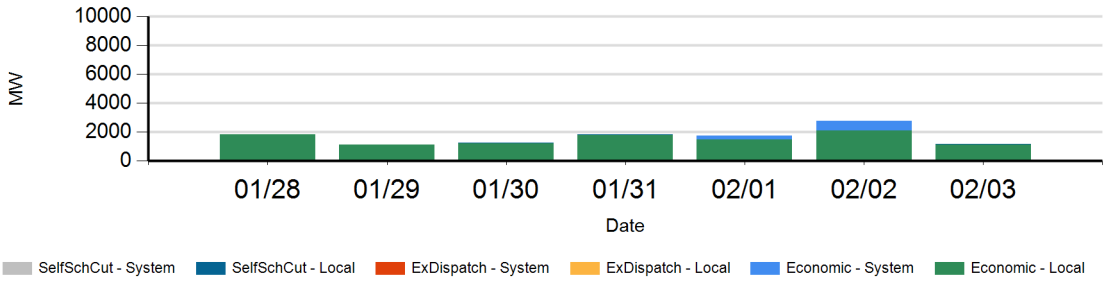
2. Maximum wind/solar generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular hour. - 2/3/2020



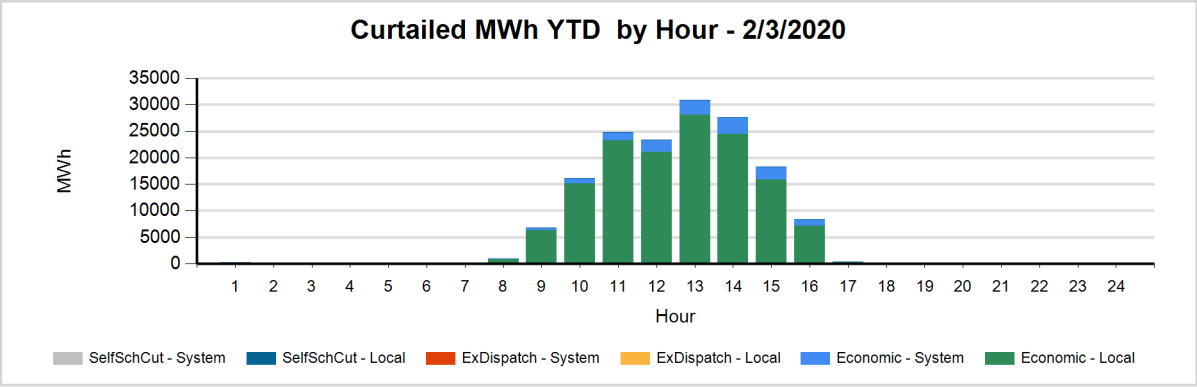
3. Daily wind/solar curtailment energy in MWh on a 7-day basis. - 2/3/2020



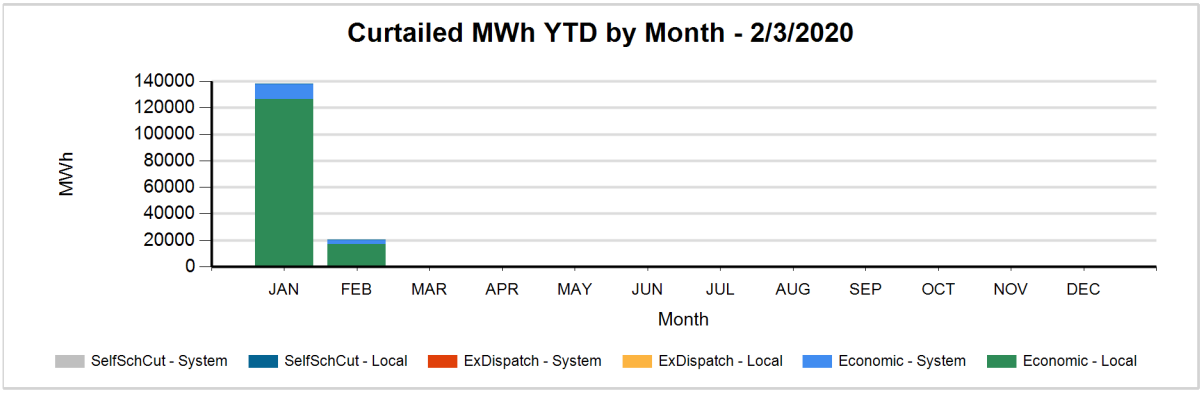
4. Maximum generation curtailment in MW for any one of the twelve real-time dispatch intervals in a particular day on a 7-day basis. - 2/3/2020



The following charts show hourly year to date wind and solar curtailment by category, if any.



The following charts show monthly year to date wind and solar curtailment by category, if any.



TYPE	YTD CURTAILED MWH - 2/3/2020
LocalEconomic	143,264
LocalSelfSchCut	547
SystemEconomic	14,650
TOTAL	158,462

California ISO

Data used to produce hourly chart

DATE	HOUR	CURT TYPE	REASON	FUEL TYPE	CURTAILED MWH	CURTAILED MW
02/03	9	Economic	Local	SOLR	57	98
02/03	9	Economic	Local	WIND	39	134
02/03	9	Economic	System	SOLR	0	
02/03	10	Economic	Local	SOLR	92	262
02/03	10	Economic	Local	WIND	24	19
02/03	11	Economic	Local	SOLR	44	115
02/03	11	Economic	Local	WIND	22	44
02/03	12	Economic	Local	SOLR	231	327
02/03	12	Economic	Local	WIND	22	29
02/03	12	Economic	System	WIND	1	
02/03	13	Economic	Local	SOLR	743	1082
02/03	13	Economic	Local	WIND	59	62
02/03	13	SelfSchCut	Local	SOLR	7	15
02/03	14	Economic	Local	SOLR	409	549
02/03	14	Economic	Local	WIND	53	54
02/03	14	SelfSchCut	Local	SOLR	14	15
02/03	15	Economic	Local	SOLR	97	196
02/03	15	Economic	Local	WIND	39	34
02/03	15	SelfSchCut	Local	SOLR	8	13
02/03	16	Economic	Local	SOLR	33	164
02/03	16	Economic	Local	WIND	19	25
02/03	17	Economic	Local	SOLR	38	168
02/03	17	Economic	Local	WIND	21	19
02/03	17	SelfSchCut	Local	SOLR	16	59
02/03	18	Economic	Local	SOLR	0	
02/03	18	Economic	Local	WIND	16	31
02/03	19	Economic	Local	WIND	1	9

The information contained in this report is preliminary and subject to change without notice. No inference, decision or conclusion should be made based on the information in this report or any series of these reports. All values are hourly average unless otherwise stated. Questions about this report should be directed to Short-Term Forecasting at ShortTermForecasting@caiso.com.